SENATE BILL REPORT SB 6061

As of January 15, 2018

Title: An act relating to the conversion of a diesel powered ferry to the use of liquefied natural gas.

Brief Description: Authorizing the conversion of a diesel powered ferry to the use of liquefied natural gas.

Sponsors: Senators Liias, Palumbo, Van De Wege and Hunt.

Brief History:

Committee Activity: Transportation: 1/15/18.

Brief Summary of Bill

• Requires the Washington State Department of Transportation (DOT) to issue a request for proposals to convert a ferry to operate on liquefied natural gas.

SENATE COMMITTEE ON TRANSPORTATION

Staff: Hayley Gamble (786-7452)

Background: <u>Liquid Natural Gas.</u> Natural gas is a fossil fuel found underground and consisting primarily of methane. To reduce storage needs, natural gas can be compressed to less than 1 percent of its standard volume, which is known as Compressed Natural Gas. It can also be cooled and liquefied, causing it to take up 1/600th of its standard volume; this is known as liquefied natural gas (LNG).

<u>Ferry Vessel Fuel Conversion.</u> All 22 vessels in the Washington State ferry system currently use diesel fuel for propulsion. Certain studies have indicated there are potential fuel cost savings, and environmental benefits from reduced emissions, if the ferry system were to move to an alternative fuel, such as natural gas. Other ferry systems operate both purpose-build LNG and retrofitted LNG or dual-fuel vessels.

<u>Washington State Ferries LNG Proposals.</u> The 2012 transportation budget directed DOT to issue a proposal for up to six state ferries to be converted from diesel to LNG propulsion.

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This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

Supplying the LNG fuel was also part of the contract. There were no bidders that made it through the application process. In the 2014 transportation budget, DOT was directed to issue a new proposal for converting the same six vessels to use LNG once the United States Coast Guard (USCG) had approved an assessment of LNG use on state ferries. USCG approval was received in 2016. A successful bidder was selected in 2017 for conversion of an Issaquah class ferry using a traditional state financing method, however funds were not appropriated and the request for proposals (RFP) expired in July 2017.

Summary of Bill: Within 30 days of the effective day of this bill, DOT must issue a RFP for the conversion of a state ferry to operate on LNG as a propulsion fuel. The contract must be design-build, finance and supply, and fixed-price, and would include design, engineering, supplying the fuel, and conversion of a ferry to LNG.

Requirements of the LNG ferry conversion process include:

- the conversion of the vessel occur within the boundaries of Puget Sound and associated waterways:
- the successful bidder obtains USCG approval regarding vessel safety and other regulatory requirements relating to LNG;
- all vessel design and engineering specifications be complete, and when applicable, meet USCG requirements before the start of construction;
- the successful bidder supplies a dependable and suitable source of LNG; and
- the successful bidder provides public outreach and education on LNG.

DOT must supply a condition survey of any nominated vessel to each qualified proposer and make the vessel available to prospective proposers at a time convenient to DOT.

Definitions are added for certain terms.

Appropriation: None.

Fiscal Note: Available.

Creates Committee/Commission/Task Force that includes Legislative members: No.

Effective Date: The bill contains an emergency clause and takes effect immediately.

Staff Summary of Public Testimony: PRO: Crowley is 125 year old company. We build all kinds of vessels and did run a POF in San Francisco. Maxim provides fuel and would like to work with Crowley on this conversion project. We have the expertise to complete this conversion. LNG is the cleanest fuel on the market today. It is time to continue the discussion of LNG being used in Washington ferries, it's a good time for Washington to look at both electrification and LNG. There are interested parties that have a new model that they believe would work well. We should look at all types of alternative fuels. The bill would require alternative financing, and Maxim could provide this. Maxim provides all the diesel to the Washington State ferry system. The current group interested in converting ferries has learned lessons from the prior conversion discussions. You will need to weigh the needs of the system and look at both LNG and electric. We can supply the fuel needed and comply with all regulations.

OTHER: We should be talking about all alternatives to diesel for Washington ferries. There have been two LNG RFPs before and there were issues working out specific terms. Washington State Ferries has been looking into ways to make private financing work and we have yet to find one. This would be a retrofit not a new build, and a passenger vessel, not freight. USCG has not yet approved all elements of LNG for passenger vessels. We would have to put the fuel on the roof of vessels per USCG and this would mean closing the sundecks on the vessels. Fueling with LNG via a truck would mean some terminal retrofits, including a secure area and moving passenger areas away from fueling areas. Financing via a long term fuel purchase would not help with stabilizing fuel costs. Over 70 percent of the fuel budget is already hedged, and this would take WSF back to market price plus an amount. Customer impacts would involve pulling a vessel out of service. We don't retrofit fuel tanks but we do retrofit electric, which is one of the reasons why WSF is interested in converting to electric power. Batteries do not have the same physical constraints within the boat as LNG tanks.

Persons Testifying: PRO: Senator Marko Liias, Prime Sponsor; Len McComb, Maxum; Jonathan Platt, Crowley; Matt Sievert, Crowley.

OTHER: Amy Scarton, Assistant Secretary for Ferries, WSDOT.

Persons Signed In To Testify But Not Testifying: No one.

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